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U.S. CENSUS BUREAU For Data - (301) 763-4673 For Questions - Michael Davis, Joe Huesman or Linnet Holland (301) 763-1605 FOR RELEASE 10:00 AM EST, MONDAY, FEBRUARY 3, 2003 CB03-24

## **DECEMBER 2002 CONSTRUCTION AT \$858.3 BILLION ANNUAL RATE**

Construction put in place during December 2002 was estimated at a seasonally adjusted annual rate of \$858.3 billion, 1.2 (±4.9) percent above the revised November estimate of \$847.9 billion, according to the U.S. Commerce Department's Census Bureau. The December figure is 2.0 (±4.9) percent above December 2001.

In constant (1996) dollars, the December annual rate was \$692.7 billion, 0.7 (±4.8) percent above the revised estimate of \$687.7 billion for November.

The value of construction put in place for the year 2002 was \$846.2 billion, 0.4 (±1.6) percent above the \$842.5 billion put in place in 2001. In constant (1996) dollars, the value in 2002 was \$692.8 billion, 1.7 percent below the 2001 figure of \$704.7 billion. Table 5 shows preliminary estimates for 2002 by type of construction.

## PRIVATE CONSTRUCTION

Spending on new residential housing units was at a seasonally adjusted annual rate of \$314.4 billion in December, 3.2 percent above the revised November estimate of \$304.7 billion. Nonresidential building construction was at a rate of \$158.6 billion, 1.9 (±3.1) percent below the revised November estimate of \$161.7 billion.

The value of new residential housing units put in place in 2002 was \$297.0 billion, 6.1 percent above the \$279.8 billion in 2001. Nonresidential building construction in 2002 was \$168.1 billion, 16.4 percent below the 2001 figure of \$201.1 billion.

## PUBLIC CONSTRUCTION

In December, the estimated seasonally adjusted annual rate of public construction put in place was \$210.5 billion, 1.0 (±4.8) percent above the revised November estimate of \$208.5 billion.

Public construction in 2002 was \$204.4 billion, 6.2 percent above the \$192.5 billion for 2001.

January 2003 data will be released on March 3, 2003 at 10:00 AM EST.

## **EXPLANATORY NOTES**

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take 2 months to establish an underlying trend for total construction and as long as 8 months for specific categories of construction.

The statistics in this release are estimated from several sources and surveys and are subject to sampling variability as well as nonsampling errors including bias and variance from response, nonreporting, and undercoverage. Estimates of the standard errors are provided in Table 4 for selected types of construction. Whenever a statement such as "2.3 (±3.1) percent above" appears in the text, this indicates the range (-0.8 to +5.4 percent) in which the actual percent change is likely to have occurred. All ranges given are 90 percent confidence intervals. If the range contains zero, it is uncertain whether there was an increase or decrease; that is, the change was not statistically significant. For any comparison cited without a confidence interval, the change is statistically significant. Statistics for the current month are preliminary estimates subject to revision in following months as additional data become available. The average absolute percent changes from preliminary estimate to first revision for the major seasonally adjusted components are as follows: total construction, 0.5 percent; private construction, 0.6 percent; private residential construction, 0.5 percent; private nonresidential construction, 1.1 percent; and public construction, 1.4 percent.

More detailed data will appear in Current Construction Reports, C30/02-12, to be issued later this month. A discussion of sources and reliability of the data appears in Current Construction Reports, C30/02-5.

Our internet address is: <a href="http://www.census.gov/c30">http://www.census.gov/c30</a>

NOTICE: Beginning August 1, 2003, the current types of construction classifications will no longer be published; new monthly detailed types of construction will be presented. Also, the constant dollar series will be discontinued. For further details see: <a href="http://www.census.gov/const/C30/newtc.html">http://www.census.gov/const/C30/newtc.html</a>

This press release is available the day of issue through the Commerce Department's on-line Economic Bulletin Board. For information, call (202) 482-1986.

Table 1. Value of Construction Put in Place in the United States, Seasonally Adjusted Annual Rate

[Billions of dollars. Detail may not add to total due to rounding. Percent changes based on unrounded figures]

Type of construction				_	_			Dec - 2001	Percent change Dec 2002 from—			
	Dec <sup>p</sup> 2002	Nov <sup>r</sup> 2002	Oct <sup>r</sup> 2002	Sep 2002	Aug 2002	Jul 2002	Jun 2002		Nov 2002	Dec 2001		
		Current dollars										
Total construction	858.3	847.9	840.0	832.2	829.8	837.8	833.7	841.8	1.2	2.0		
Private construction <sup>1</sup>	647.8	639.3	636.8	626.5	627.1	635.7	634.6	640.8	1.3	1.1		
Residential buildings <sup>2</sup> New housing units	434.6 314.4	422.4 304.7	418.0 299.7	412.2 296.7	409.3 292.7	414.0 295.2	410.8 292.8	395.2 283.1	2.9 3.2	10.0 11.1		
1 unit	280.7	273.1	267.9	263.8	259.3	261.8	260.0	250.2	2.8	12.2		
2 units or more  Nonresidential buildings	33.8 158.6	31.6 161.7	31.9 160.2	33.0 156.5	33.4 159.8	33.4 163.7	32.8 166.7	32.9 184.4	6.9 - 1.9	2.6 - 14.0		
Industrial	15.0	14.4	14.2	13.8	14.6	15.8	16.7	23.0	4.1	- 35.0		
Office	33.7 8.8	34.9 9.1	34.2 8.9	34.5 9.0	36.7 9.1	37.8 9.8	37.9 10.1	44.0 12.7	- 3.5 - 3.7	- 23.6 - 30.3		
Other commercial	52.7	53.7	54.0	52.8	53.0	53.3	54.4	58.0	- 1.8	- 9.1		
Religious	8.0 14.4	8.3 14.1	7.7 14.2	7.9 12.6	8.0 12.4	8.2 12.8	8.5 12.7	8.1 14.3	- 3.8 2.2	- 1.0 0.7		
Hospital and institutional	18.4	19.3	18.6	18.0	17.4	17.7	17.8	15.3	- 4.9	20.7		
Miscellaneous buildings Telecommunications	7.6 (NA)	7.8 15.7	8.4 16.4	8.0 15.2	8.6 16.4	8.3 17.3	8.7 18.4	9.0 18.2	- 3.0 (NA)	- 15.7 (NA)		
All other private	2.5	2.5	2.4	2.6	2.6	2.3	3.0	3.1	- 0.2	- 21.7		
Public construction	210.5	208.5	203.2	205.7	202.8	202.1	199.1	201.0	1.0	4.7		
Housing and redevelopment Industrial	5.8 1.6	5.4 1.5	5.1 1.6	5.6 1.4	6.0 2.2	5.7 1.8	5.7 1.9	5.3 2.3	6.9 7.3	9.8 - 28.7		
Educational	64.7	66.0	65.0	64.8	62.4	62.3	61.2	58.1	- 2.0	11.4		
Hospital	5.1 29.7	5.1 31.1	4.8 31.2	5.3 30.6	5.1 30.6	4.8 30.2	4.7 31.1	4.4 32.0	0.1 - 4.5	15.6 - 7.2		
Highways and streets	56.3	54.4	52.0	54.7	53.8	54.5	51.4	55.3	3.5	1.9		
Military facilities	3.3 8.4	3.0 7.7	2.7 8.3	3.1 7.7	2.8 7.5	3.3 7.0	3.0 7.3	2.6 7.5	10.5 8.8	28.8 12.3		
Sewer systems	9.3 7.5	9.4 7.1	9.0 7.3	9.2 7.4	9.5 7.1	9.5 7.0	9.4 7.6	8.9 7.6	- 0.9 6.4	4.6 - 1.4		
Water supply facilities	18.8	17.9	16.2	15.8	15.7	15.9	16.0	17.2	5.0	9.8		
				1	1996	dollars		ı				
Total construction	692.7	687.7	683.5	679.6	680.0	687.7	682.0	694.1	0.7	- 0.2		
Private construction <sup>1</sup>	521.0	517.1	517.3	511.1	513.4	520.8	518.6	527.1	8.0	- 1.2		
Residential buildings <sup>2</sup> New housing units	345.4 250.0	337.9 243.8	336.3 241.1	333.5 240.1	332.7 238.0	336.3 239.8	333.2 237.5	322.1 230.7	2.2 2.5	7.2 8.3		
1 unit	223.1	218.5	215.5	213.4	210.9	212.7	210.9	203.9	2.1	9.4		
2 units or more  Nonresidential buildings	26.9 128.1	25.3 131.1	25.6 130.2	26.7 127.6	27.1 130.3	27.1 133.7	26.6 135.8	26.8 151.0	6.2 - 2.3	0.1 - 15.2		
Industrial	12.1	11.6	11.5	11.2	11.9	12.9	13.6	18.8	3.7	- 35.9		
Office	27.2 7.1	28.3 7.4	27.8 7.2	28.2 7.3	29.9 7.4	30.9 8.0	30.9 8.2	36.1 10.4	- 3.9 - 4.0	- 24.6 - 31.3		
Other commercial	42.6	43.5	43.9	43.0	43.2	43.5	44.3	47.5	- 2.2	- 10.4		
Religious	6.5 11.6	6.8 11.4	6.3 11.5	6.4 10.3	6.6 10.1	6.7   10.4	6.9 10.3	6.6 11.7	- 4.2 1.8	- 2.3 - 0.7		
Hospital and institutional	14.9	15.7	15.1	14.6	14.2	14.4	14.5	12.5	- 5.2	19.0		
Miscellaneous buildings Telecommunications	6.1 (NA)	6.3 14.7	6.8 15.2	6.5 14.2	7.0 15.2	6.8 16.3	7.1 17.0	7.4 17.0	- 3.4 (NA)	- 16.9 (NA)		
All other private	2.1	2.1	2.0	2.2	2.2	2.0	2.5	2.7	- 0.5	- 23.5		
Public construction	<b>171.7</b> 4.6	<b>170.6</b> 4.3	<b>166.3</b> 4.1	<b>168.5</b> 4.5	<b>166.6</b> 4.9	<b>166.9</b> 4.6	<b>163.4</b> 4.6	<b>167.0</b> 4.3	<b>0.6</b> 6.3	2.8 7.1		
Industrial	1.3	1.2	1.3	1.1	1.8	1.5	1.5	1.9	6.9	- 29.7		
Educational	52.2 4.1	53.5 4.1	52.8 3.9	52.8 4.3	50.9 4.2	50.9 3.9	49.8 3.8	47.6 3.6	- 2.4 - 0.3	9.8 14.0		
Other public buildings	24.0	25.2	25.3	24.9	24.9	24.7	25.4	26.2	- 4.8	- 8.4		
Highways and streets	45.5 2.7	44.1 2.4	42.1 2.2	44.2 2.5	43.7 2.3	44.8 2.7	41.7 2.4	45.6 2.1	3.2 10.1	- 0.4 26.5		
Conservation and development	7.3	6.7	7.2	6.7	6.5	6.1	6.4	6.6	8.4	9.5		
Sewer systems	8.0 6.2	8.1 5.9	7.8 6.1	7.9 6.1	8.3 5.8	8.3 5.8	8.1 6.3	7.9 6.5	- 1.3 6.2	2.0 - 4.1		
Miscellaneous public	15.7	15.0	13.5	13.3	13.2	13.5	13.4	14.7	4.8	7.3		
								!				

NA Not available.

<sup>&</sup>lt;sup>p</sup>Preliminary.

rRevised.

<sup>&</sup>lt;sup>1</sup>Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential.

<sup>2</sup>Includes improvements.

Table 2. Value of Construction Put in Place in the United States, Not Seasonally Adjusted in Current Dollars

[Billions of dollars. Detail may not add to total due to rounding. Percent changes based on unrounded figures]

									Year to date		e
Type of construction	Dec <sup>p</sup> 2002	Nov <sup>r</sup> 2002	Oct <sup>r</sup> 2002	Sep 2002	Aug 2002	Jul 2002	Jun 2002	Dec 2001	Dec 2002	Dec 2001	Percent change
Total construction	63.9	72.5	77.2	78.2	79.4	78.1	76.2	62.6	846.2	842.5	0.4
Private construction <sup>1</sup>	48.6	55.2	58.2	57.4	58.5	58.5	57.8	48.1	641.8	650.0	- 1.3
Residential buildings <sup>2</sup> New housing units.  1 unit 2 units or more.  Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous buildings Telecommunications All other private	31.2 23.4 20.7 2.7 12.7 1.3 2.7 0.7 4.1 0.7 1.1 1.5 0.6 (NA)	36.6 26.4 23.8 2.6 13.8 1.2 3.0 0.7 4.7 0.7 1.1 1.7 0.7 0.7	38.6 27.1 24.3 2.8 14.2 1.3 3.0 0.8 5.0 0.7 1.2 1.6 0.7	38.6 27.3 24.5 2.8 13.8 1.2 3.0 0.8 4.9 0.7 1.1 1.5 0.7 1.3	38.8 27.5 24.5 2.9 14.2 1.3 3.2 0.8 4.9 0.7 1.2 1.5 0.7	38.8 27.5 24.6 2.9 14.2 1.4 3.2 0.8 4.7 0.7 1.2 1.4 0.7 1.5 0.2	38.5 26.5 23.6 2.9 14.4 1.4 3.2 0.9 4.8 0.7 1.2 1.5 0.7	28.2 20.9 18.3 2.6 14.7 1.9 3.5 1.0 4.5 0.7 1.1 1.3 0.7 1.6 0.3	414.8 297.0 263.6 33.4 168.1 16.3 37.8 10.2 56.0 8.3 13.6 17.4 8.4 (NA) 2.8	388.7 279.8 249.1 30.7 201.1 29.0 52.0 14.4 60.3 8.3 12.6 15.1 9.3 18.5 3.0	6.7 6.1 5.8 8.8 - 16.4 - 43.8 - 27.3 - 29.1 - 7.2 0.2 7.8 15.1 - 9.5 (NA) - 7.5
Public construction	15.3	17.3	19.0	20.8	20.9	19.5	18.4	14.4	204.4	192.5	6.2
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development Sewer systems Water supply facilities Miscellaneous public.	0.5 0.1 4.7 0.4 2.4 3.5 0.3 0.7 0.6 1.4	0.5 0.1 5.2 0.4 2.7 4.5 0.3 0.6 0.8 0.6	0.5 0.1 5.7 0.4 2.8 5.7 0.2 0.6 0.8 0.7 1.5	0.5 0.2 6.2 0.5 2.7 6.3 0.3 0.9 0.9	0.5 6.6 0.4 2.7 6.4 0.2 0.7 0.9 1.5	0.5 0.2 6.2 0.4 2.5 6.0 0.3 0.6 0.8	0.5 0.2 5.7 0.4 2.7 5.2 0.3 0.6 0.9 0.7	0.4 0.2 4.3 0.4 2.5 3.3 0.2 0.6 0.7 0.6 1.3	5.4 1.8 63.3 5.0 30.9 54.3 2.9 7.8 9.4 7.3 16.4	4.8 1.6 55.8 4.1 30.9 54.0 2.8 7.1 8.8 7.2 15.6	12.8 16.4 13.5 22.8 0.2 0.4 2.5 9.8 7.2 1.5

NA Not available.

Preliminary.

rRevised.

Table 3. U.S. Census Bureau Composite Fixed-Weighted (1996 Weights) Price Index and Implicit Price
Deflator

[1996 = 100]

Period	F	ixed-Weighted Inde	ex	Implicit Price Deflator			
	2000	2001	2002	2000	2001	2002	
January February March April May June July August September October November. December.	115.1 115.6	117.8 118.3 118.7 118.8 119.2 119.7 119.6 119.9 120.2 120.9 121.1	121.5 121.5 121.3 121.2 121.6 122.2 122.0 122.2 122.6 [123.1 [123.3]	113.3 113.8 113.9 114.6 114.9 115.1 115.6 115.8 115.9 116.4 116.7	117.9 118.3 118.6 118.7 119.0 119.5 119.4 119.7 120.0 120.8 121.0	121.2 121.3 121.3 121.7 122.3 121.8 122.1 122.5 122.5 122.9 123.3 P123.8	
Annual	115.3	119.6	<sup>p</sup> 122.2	115.3	119.6	<sup>p</sup> 122.1	

Preliminary. Revised.

Note: The fixed-weighted price index is a weighted average of the individual price index series used to deflate the Value of Construction Put in Place (VIP) series. In calculating the index, the weights (the composition of current dollar VIP in 1996 by category of construction) are held constant. Consequently, the index reflects only changes in prices. The implicit price deflator is a derived ratio of total current to constant dollar VIP (multiplied by 100). It is the average of the individual price indexes used in the deflation of VIP, but the prices are weighted by the composition of VIP each period. As a result, the implicit price deflator reflects not only changes in prices, but also changes in the composition of VIP, and its use as a measure of price change is discouraged.

<sup>&</sup>lt;sup>1</sup>Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential. <sup>2</sup>Includes improvements.

Table 4. Relative Standard Errors and Coefficients for Standard Errors of Changes

	Relative	e standard error (p	Coefficient for changes		
Type of construction	Monthly estimate	Year-to-date estimate	Annual estimate	Month-to-month change (k1)	Year-to-date change (k2)
Total construction	2	1	1	.03	.01
Private construction	3	1	1	.04	.02
Residential buildings  New housing units  1 unit.  2 units or more	5 2 2 4	2 1 2 3	2 1 2 3	.06 .01 .01 .03	.03 .01 .01
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional. Miscellaneous buildings	2 3 4 7 5 9 7 6 7	1 2 2 5 2 5 5 5 5 4	1 2 2 5 2 5 5 5 4	.02 .04 .05 .09 .06 .12 .10 .07	.01 .03 .03 .07 .03 .07 .07 .07
Public construction	2	1	1	.03	.01
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development. Sewer systems Water supply facilities Miscellaneous public	8 (NA) 3 6 3 4 (NA) 4 6 8	4 (NA) 2 4 2 2 (NA) 2 3 3	4 (NA) 2 4 2 2 (NA) 2 3 3 4	.11 (NA) .04 .08 .04 .05 (NA) .06 .08 .11	.06 (NA) .03 .06 .03 .03 (NA) .03 .04 .04

NA Not available.

Note: All statistics are based upon 2001 data. The coefficient (k1) for the month-to-month change is applicable to change from the previous month and change from the same month a year ago.

The standard errors (SE) for month-to-month and year-to-date changes may be approximated by the following formula with the appropriate coefficient shown in Table 4:

SE(change) = (k1 or k2) (100 + % change shown in table).

For example, suppose Table 1 showed that private 'office' construction increased 9 percent from last month. The standard error of the 9 percent increase is about equal to 5 percentage points:

SE(9% increase) = (.05)(100+9) = (.05)(109) = 5%

Once the standard error is available, one can construct a 90 percent confidence interval of the change by multiplying the standard error by 1.6. In the above example, an approximate 90 percent confidence interval of the 9 percent increase for private 'office' construction would be between:

1 and 17 percent (9% plus or minus 8% (5% x 1.6)).

Table 5. Annual Value of Construction Put in Place in the United States in Current Dollars and 1996 Dollars

[Detail may not add to total due to rounding]

		Value (millior	Percent change from 2001 to 2002			
Type of construction	Current	dollars	1996	dollars		
	2002 <sup>p</sup>	2001	2002 <sup>p</sup>	2001	Current dollars	1996 dollars
Total construction	846,192	842,539	692,793	704,747	0.4	- 1.7
Private construction <sup>1</sup>	641,835	650,030	524,528	542,782	- 1.3	- 3.4
Residential buildings <sup>2</sup> New housing units  1 unit  2 units or more	414,838 296,976 263,583 33,393	388,705 279,772 249,086 30,686	335,990 240,523 213,466 27,056	322,305 232,008 206,557 25,451	6.7 6.1 5.8 8.8	4.2 3.7 3.3 6.3
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous buildings Telecommunications	168,093 16,332 37,831 10,221 55,983 8,330 13,615 17,403 8,379 (NA)	201,094 29,046 52,020 14,421 60,297 8,310 12,629 15,114 9,259 18,538	137,132 13,326 30,869 8,341 45,670 6,794 11,105 14,191 6,835 (NA)	166,587 24,072 43,112 11,948 49,933 6,880 10,454 12,518 7,670	-16.4 -43.8 -27.3 -29.1 - 7.2 0.2 7.8 15.1 -9.5 (NA)	- 17.7 -44.6 -28.4 -30.2 - 8.5 - 1.3 6.2 13.4 -10.9 (NA)
All other private	2,758	2,983	2,331	2,584	- 7.5 <b>6.2</b>	- 9.8 <b>3.9</b>
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development Sewer systems Water supply facilities Miscellaneous public	204,357 5,358 1,811 63,297 4,979 30,917 54,253 2,915 7,818 9,381 7,258 16,371	192,509 4,751 1,556 55,752 4,053 30,855 54,026 2,843 7,122 8,751 7,152 15,648	168,265 4,339 1,477 51,624 4,061 25,219 44,226 2,378 6,848 8,215 6,057 13,823	161,965 3,940 1,288 46,148 3,355 25,549 45,415 2,372 6,371 7,828 6,138 13,561	12.8 16.4 13.5 22.8 0.2 0.4 2.5 9.8 7.2 1.5	10.1 14.7 11.9 21.0 - 1.3 - 2.6 0.3 7.5 4.9 - 1.3

NA Not available. Preliminary.

<sup>&</sup>lt;sup>1</sup>Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential.

<sup>2</sup>Includes improvements.